AMSAT News Service Weekly Bulletins
Issue: ANS-023
Date: 2022-01-23
Sources: amsat-ans-2022-ans-023-weekly-hyperkitty-1c124bef74.txt

---
AMSAT NEWS SERVICE
ANS-023

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor(a)amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

In this edition:

* Visit AMSAT at Orlando Hamcation
* EASAT-2 and HADES Updates
* AMSAT EA Receives Two OSCAR Designations: SO-114 & SO-115
* Amateur Operation in 3.45 – 3.5 GHz Must Cease by April 14, 2022
* Launch of a Wooden Satellite Still Pending
* Changes to AMSAT-NA TLE Distribution for January 20, 2022
* ARISS News
* Upcoming Satellite Operations
* Hamfests, Conventions, Maker Faires, and Other Events
* Satellite Shorts From All Over

ANS-023 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 Jan 23

Visit AMSAT at Orlando Hamcation

Hamcation 2022 is scheduled for February 11 - 13, 2022 at the Central Florida Fairgrounds and Expo Center in Orlando, FL. You are invited to visit the AMSAT booth located at the far west end of West Hall. There you can see the SatPC32 and CubeSat Sim demos, ask questions, or just say "Hi." In addition, AMSAT President, Robert Bankston, KE4AL, AMSAT President, will host An AMSAT forum in Classroom 1 on Saturday at 3:00 PM. For more information about Hamcation 2022, including directions, operating hours, vendors, and a complete forum schedule, please visit https://www.hamcation.com/.

If you are interested at volunteering at the AMSAT booth, contact Dave Jordan, AA4KN, at aa4kn at amsat dot org.

[ANS thanks Dave Jordan, AA4KN, for the above information.]

+=+=+=

Donate today at
https://www.amsat.org/join-the-amsat-presidents-club/
You won't want to miss it!
+=+=+=

https://twitter.com/ea4gpz/status/1482696274797338625."

[ANS thanks Felix Paez, EA4GQS, AMSAT-EA Mission Manager for the above information.]

AMSAT EA Receives Two OSCAR Designations: SO-114 & SO-115

On January 13, 2022, the EASAT-2 and HADES satellites were launched on a Falcon 9 launch vehicle from the Kennedy Space Center in Florida. Developed by AMSAT-EA, both satellites carry FM and digital repeater payloads to provide services to amateur radio enthusiasts around the world.

At the request of AMSAT-EA, AMSAT hereby designates EASAT-2 as Spain-OSCAR 114 (SO-114) and HADES as Spain-OSCAR 115 (SO-115). We congratulate AMSAT-EA, thank them for their contribution to the amateur satellite community, and wish them continued success on this and future projects.

[ANS thanks Drew Glasbrenner, KO4MA, AMSAT VP Operations/OSCAR Number Administrator for the above information.]

+=+=+=

“I regret to inform you that IARU is not in a position to support the WISA Woodsat Coordination request,” the coordinator said. “The main reason is that the primary mission doesn’t seem to be an amateur mission.”

As announced last year, WISA Woodsat was designed to accommodate multiple missions — from materials science, space education, and awareness to promoting and facilitating amateur radio communication with and via satellites. No transponder was on board, but the satellite’s sponsors said they had the support of Finland’s IARU member-society, SRAL, to use amateur radio frequencies. They are now reworking the spacecraft to use commercial radio frequencies.

“To our great disappointment, we can’t serve the radio amateur community with the LoRa-repeater mission as we had hoped and planned. We will continue to share the pictures and data online, but the technical aspect has been diminished due to this decision,” said WISA Woodsat’s Chief Engineer Samuli Nyman of Arctic Astronautics.

Meanwhile, LignoSat, a 1U-sized CubeSat with an outside structure mainly composed of wood, has applied for IARU frequency coordination and hopes to launch from the ISS in 2023. Built by students at Japan’s Kyoto University, LignoSat includes a unique amateur radio payload but not a transponder.

The LignoSat application for IARU Satellite Frequency Coordination in December said the CubeSat would carry amateur radio equipment that will extract call signs of amateur radio stations from uplinked FM packet signals and respond to them via the CW downlink and the sender’s call signs to convey thank you messages. The plan proposes UHF downlinks for CW and FM.

The satellite’s development team, comprised of Kyoto University and Sumitomo Forestry Company, said it’s aiming to harness the environmental friendliness and the economy of wood in spacecraft development. They say a satellite with a wooden exterior would burn up upon re-entering Earth’s atmosphere at the end of its mission, lessening its burden on the environment. The wooden framework also will permit the satellite’s antennas to be inside the spacecraft. A plan is under way to use an experimental apparatus on the International Space Station to hold wooden sheets of varying hardness, taken from several tree species, attached. These would remain exposed to the space environment for about 9 months to determine their deterioration.

The team is headed by Japan Aerospace Exploration Agency (JAXA) astronaut Tako Doi. Now a Kyoto University professor, Doi was the first JAXA astronaut to take part in spacewalks from the shuttle Columbia in 1997. He said the concept, if successful, could lead the way to “allowing even children who are interested in space to make a satellite.” LignoSat would be deployed from the ISS in July 2023.

[ANS thanks the ARRL for the above information.]

Changes to AMSAT-NA TLE Distribution for January 20, 2022

The following satellite has been added to this week's AMSAT TLE Distribution:

- DELFI-PQ - NORAD Cat ID 51074 (Thanks to Nico Janssen, PA0DLO for the identification)

- Still waiting for the SpaceTrack Catalog ID for Tevel-1 thru Tevel-8, EASAT-2, and Hades to be identified.

As always, the latest Keps data can be found at https://mailman.amsat.org/hyperkitty/list/keps(a)amsat.org.

[ANS thanks Ray Hoad, WA5QGD, AMSAT Orbital Elements Manager, for the above information.]

+=+=+=

https://amsat.org/product-category/hardware/

+=+=+=

+ ARRL National Convention
 February 10-13, 2022
 DoubleTree by Hilton Orlando at SeaWorld
 10100 International Dr, Orlando, FL 32821

+ Orlando HamCation
 February 11-13, 2022
 Central Florida Fairgrounds and Expo Park
 4603 West Colonial Drive
 Orlando, Florida 32808

+ CubeSat Developers Workshop
 April 26–28, 2022
 San Luis Obispo, CA

+ Hamvention 2022
 May 20, 2022 to May 22, 2022
 Greene County Fairgrounds and Expo Center
 210 Fairground Road
 Xenia, Ohio 45385
 https://www.hamvention.org

+ 2022 Rocky Mountain ARRL Division Convention
 October 7, 2022 - October 9, 2022
 Event Center at Archer
 3921 Archer Pkwy
 Cheyenne, Wyoming 82007
 https://wyhamcon.org/site.

[ANS thanks Paul Overn, KE0PBR, AMSAT Events page manager, for the above information.]

Satellite Shorts From All Over

+ The January operating schedule shows one remaining date in January for FO-29 operation. That will be January 29 from 00:03 UTC until battery exhaustion.
FO-29 will be in full sunshine from January 28 to the end of April. During that time, continuous operation can be expected.
[AMSAT thanks Akira Kaneko,JA1OGZ, for the above information.]

+ The SpaceX Smallsat Rideshare program offers a viable and affordable option to launch up to 200 kg into a sun-synchronous, low Earth orbit. That is why, along with approximately 80-90 other satellites, USC’s Dodona satellite—it’s third ever—hitched a ride on SpaceX’s latest mission, Transporter 3 this week. Dodona is a project out of USC’s Space Engineering Research Center. Part of SERC’s mission is creating hands-on opportunities for students and faculty to build and test advanced space technology, in addition to integrating, launching and operating small satellites. Dodona takes advantage of the space focused curriculum through analysis tools and techniques that are taught at USC through the Astronautical Engineering Department. The complete story can be found at https://www.isi.edu/news/45250/usc-launches-its-3rd-satellite-into-space/.
[AMSAT thanks Information Sciences Institute for the above information.]

+ The very first Svalbard QO-100 Satellite DX-Pedition will take place April 22-24, 2022 from Kapp Linné – Isfjord Radio at 78° North. They will operate two QO-100 satellite stations under the callsigns JW0W and JW100QO, while JW0X will be used by another team for contacts on shortwave. With QO-100 only 3° above the horizon, Kap Linné was the only suitable place in the area with Svalbard at the edge of the satellite footprint. Looking for a suitable location to stay and getting there, is one of the biggest challenges and cost drivers for the team. More information at https://amsat-dl.org/en/svalbard-qo-100-satellite-dx-pedition/.
[AMSAT thanks AMSAT-DL for the above information.]

+ The University of Cambridge has announced the creation of the Raspberry Pi Computing Education Research Centre. With computers and digital technologies increasingly shaping all of our lives, it’s more important than ever that every young person, whatever their background or circumstances, has

meaningful opportunities to learn about how computers work and how to create with them. The Raspberry Pi Computing Education Research Centre wants to increase understanding of what works in teaching and learning computing, with a particular focus on young people who come from backgrounds that are traditionally underrepresented in the field of computing or who experience educational disadvantage. MOre information can be found at tinyurl.com/ANS-023-Cambridge.
[AMSAT thanks Raspberrypi.org for the above information.]

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Frank Karnauskas, N1UW
n1uw at amsat dot org